

said monoclonal antibody binds to an antigenic determinant that contains an inositol group and a glycerol backbone in said phosphatidylinositol-3,4,5-triphosphate.

19. The immunoassay method of claim 15, wherein said monoclonal antibody does not cross-react with phosphatidylinositol-4,5-biphosphate.

20. An immunoassay method which comprises the steps of :

(a) reacting a monoclonal antibody specifically recognizing phosphatidylinositol-3,4,5-triphosphate, or a variable region thereof, with phosphatidylinositol-3,4,5-triphosphate present in a sample; and,

(b) detecting the binding based on an immunological reaction between said antibody, or said variable region, thereof, and the triphosphate; wherein, <sup>the phosphatidylinositol-3,4,5</sup>

said monoclonal antibody comprises an immunoglobulin, or variable region thereof, which recognizes phosphatidylinositol-3,4,5-triphosphate; wherein,

said immunoglobulin, or said variable region thereof, comprises an immunoglobulin heavy chain comprising:

- (i) CDR1 comprising the amino acid sequence of SEQ ID NO: 5;
- (ii) CDR2 comprising the amino acid sequence of SEQ ID NO: 6; and,
- (iii) CDR3 comprising the amino acid sequence of SEQ ID NO: 7.

21. The immunoassay method according to claim 19, wherein said immunoglobulin comprises an immunoglobulin light chain comprising:

- (i) CDR1 comprising the amino acid sequence of SEQ ID NO: 8;
- (ii) CDR2 comprising the amino acid sequence of SEQ ID NO: 9; and,
- (iii) CDR3 comprising the amino acid sequence of SEQ ID NO: 10.

22. The immunoassay method of claim 15, wherein said method comprises observing the degree to which the immunological reaction between the antibody, or a variable region

thereof, and an antigenic determinant recognized by said antibody, or said variable region thereof, is inhibited by phosphatidylinositol-3,4,5-triphosphate present in a sample.

23. An immunoassay kit for assaying Phosphatidylinositol-3,4,5-triphosphate, wherein said kit comprises a monoclonal antibody, or a variable region thereof, which:

- (a) specifically recognizes phosphatidylinositol-3,4,5-triphosphate; and;
- (b) binds to an antigenic determinant that contains an inositol group and a glycerol backbone in said phosphatidylinositol-3,4,5-triphosphate.

24. The immunoassay kit of claim 20, wherein said monoclonal antibody does not cross-react with Phosphatidylinositol-4,5-biphosphate.

25. An immunoassay kit for assaying phosphatidylinositol-3,4,5-triphosphate, wherein the kit comprises a monoclonal antibody specifically recognizing Phosphatidylinositol-3,4,5-triphosphate, or a variable region thereof, wherein said monoclonal antibody comprises an immunoglobulin, or variable region thereof, which recognizes Phosphatidylinositol-3,4,5-triphosphate, wherein said immunoglobulin, or variable region thereof, comprises an immunoglobulin heavy chain comprising:

- (i) CDR1 comprising the amino acid sequence of SEQ ID NO: 5;
- (ii) CDR2 comprising the amino acid sequence of SEQ ID NO: 6; and,
- (iii) CDR3 comprising the amino acid sequence of SEQ ID NO: 7.

26. The immunoassay kit of claim 22, wherein said immunoglobulin comprises an immunoglobulin light chain comprising:

- (i) CDR1 comprising the amino acid sequence of SEQ ID NO: 8;
- (ii) CDR2 comprising the amino acid sequence of SEQ ID NO: 9; and,
- (iii) CDR3 comprising the amino acid sequence of SEQ ID NO: 10.